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EXAMINER
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THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2624

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/030,010

Applicant(s)

LUBCKE, BERND

Examiner

James A. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2001 and 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-43 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/29/01, 2/15/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 29 October 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### *Claim Objections*

2. Claims 29-34 are objected to because of the following informalities:

Claim 29, line 16 states "comprising a monitoring device". The use of "comprising" again in line 16 is redundant since "comprising" is already used in the preamble of the claim.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 recites the limitation "the wireless transmission" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, claim 28 recites the limitation "the wireless transmission" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Secondly, claim 28 recites "a plurality of engraving machines are present." This limitation is merely the state of a system or a description of the physical construction system. The limitation is not a step of a method. Thus, claim 28 as currently recited does not particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 35-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the means or unit by which the engraved test cups are produced; and the means or unit by which the measured values of the actual dimensions of the engraved test cups are determined.

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***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 20-21, 23, 29 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of Babel (US Patent 5,417,038).

**Regarding claim 20:** Wouch discloses, before actual engraving of the printing cylinder with an engraving stylus of an engraving element driven by an engraving control signal (column 3, lines 2-8 of Wouch), engraving sample cups (figure 1 (14) and figure 3 of Wouch) for predetermined rated tonal values in a test engraving with the engraving stylus (column 3, lines 10-14 and lines 18-22 of Wouch); measuring actual dimensions of the sample cups with a measurement device put in place on the printing cylinder (column 4, lines 54-59 of Wouch) and comparing the actual dimensions to rated dimensions corresponding to the predetermined rated tonal values (column 4, line 66 to column 5, line 2 of Wouch) in order to acquire setting values with which the engraving control signal is calibrated (column 4, lines 43-48 of Wouch) such that engraved actual tonal values correspond to the rated tonal values to be engraved (column 3, line 66 to column 4, line 5 of Wouch).

Wouch does not disclose expressly carrying out a monitoring to see whether or not the measurement device is present on the

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printing cylinder; preventing an engraving start when the measurement device is present on the printing cylinder; and if the measurement device is not present on the printing cylinder, engraving with the engraving stylus a sequence of cups into the rotating printing cylinder where actual dimensions of the cups determine the actual tonal values that are engraved.

Babel discloses carrying out a monitoring to see whether or not an object is present in a given operating area (column 4, lines 24-28 of Babel); preventing the start of operation of the main device when the object is present in said given operating area (column 4, lines 24-28 of Babel); and if the object is not present in said given operating area, performing the operations of said main device (column 4, lines 24-28 of Babel). The detector (figure 2(12) of Babel) prevents movement during loading if an operator is detected (column 4, lines 24-28 of Babel). Thus, the main device can operate if there is no operator present, which is the normal function being interrupted by the detected presence of the operator.

Wouch and Babel are combinable because they are from similar problem solving areas, namely digital control of electronic device operation based on digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to prevent operation of the main device if an object is detected to be present on in a specific operating area, as taught by Babel, wherein the object is the measurement device taught by Wouch, the main device is the engraving device taught by Wouch, and the operation is the calibration of the engraving device, as taught by Wouch. In Babel, the operator is protected from injury by the detector preventing movement of the stand during loading. Applied to the

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engraving device of Wouch, the measurement device would be detected where said measurement device would be likely to be broken, namely on the printing cylinder, which is the portion of the engraving device that has the greatest level of physical motion. If the measurement device is detected on the printing cylinder, then the engraving operations are prevented. If the measurement device is not detected, then engraving operations are allowed, and therefore engraving with the engraving stylus a sequence of cups into the rotating printing cylinder where actual dimensions of the cups determine the actual tonal values that are engraved is performed, as per the normal operations of the engraving device taught by Wouch. The motivation for doing so would have been to prevent destruction of the measurement device taught by Wouch. One of ordinary skill in the art at the time of the invention would have recognized that the detector taught by Babel operates for the purpose of preventing injury to the operator. Thus, applied to the engraving device of Wouch, one of ordinary skill in the art at the time of the invention would have recognized that the detector of Babel, if applied to the teachings of Wouch, would prevent destruction to the measurement device. Therefore, it would have been obvious to combine Babel with Wouch to obtain the invention as specified in claim 20.

**Regarding claim 21:** Wouch does not disclose expressly that a rotation of the printing cylinder is prevented given the presence of the measurement device on the printing cylinder.

Babel discloses that movement of the main device is prevented given the presence of the operator on the main movement area (column 4, lines 24-28 of Babel).

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Wouch and Babel are combinable because they are from similar problem solving areas, namely digital control of electronic device operation based on digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to prevent operation given the presence of an object, as taught by Babel. Applied to Wouch, the operation of printing cylinder rotation would be prevented if the measurement device is present on said printing cylinder. The motivation for doing so would have been to prevent destruction of the measurement device taught by Wouch. One of ordinary skill in the art at the time of the invention would have recognized that the detector taught by Babel operates for the purpose of preventing injury to the operator. Thus, applied to the engraving device of Wouch, one of ordinary skill in the art at the time of the invention would have recognized that the detector of Babel, if applied to the teachings of Wouch, would prevent destruction to the measurement device. Therefore, it would have been obvious to combine Babel with Wouch to obtain the invention as specified in claim 21.

**Further regarding claim 23:** As discussed above in the arguments regarding claim 20, Wouch in view of Babel teaches preventing an engraving start when the measurement device is present on the printing cylinder. The portion relied upon in Babel discloses "a detector 12 for sensing the presence of the operator which prevents the stand from moving during loading" (column 4, lines 26-28 of Babel). In order to prevent the motion of the main device, which is the printing cylinder is Wouch, the generation of some form of control signal is inherent. Otherwise, there is no relay of information which indicates that said measurement device is present on the



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printing cylinder. Thus, Wouch in view of Babel teaches that a control signal is generated given the presence of the measurement device on the printing cylinder.

**Regarding claim 29:** Wouch discloses a rotationally seated printing cylinder (figure 1(12) of Wouch) driven by a first drive (column 3, lines 9-16 of Wouch). In order for the printing cylinder to rotate and thus produce an engraved image (column 3, lines 9-16 of Wouch), some sort of drive must drive the rotation.

Wouch further discloses an engraving element (figure 1(16) of Wouch) driven by an engraving control signal for engraving cups in the printing cylinder (column 3, lines 4-6 of Wouch) that is moved axially past the printing cylinder by a second drive (as shown in figure 1 of Wouch). Since the printing cylinder has to rotate to print, the engraving head moves axially past the printing cylinder in order to cut the engraving cups, as is typically done in engraving printers.

Wouch further discloses a signal editing unit (figure 1(38 (portion)) of Wouch) for generating the engraving control signal (figure 1("Control Data") of Wouch) for the engraving element (column 4, line 66 to column 5, line 5 of Wouch); and a controller (figure 1(38(portion)) of Wouch) for controlling the engraving machine (column 4, line 68 to column 5, line 5 of Wouch) and which is in communication with the signal editing unit (also a part of the microprocessor (figure 1(38) of Wouch), with the first drive, and with the second drive (column 4, line 68 to column 5, line 5 of Wouch). Since the microprocessor (figure 1(38) of Wouch) controls the engraving as a whole (column 4, line 66 to column 5, line 5 of Wouch), then said microprocessor is in communication with the first drive and the

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second drive. The controller and the signal editing unit each correspond with a particular portion of the physically embodied software, which is executed by the microprocessor.

Wouch does not disclose expressly a monitoring device connected to the controller that checks a presence of a measurement device put in place on the printing cylinder for measuring actual dimensions of engraved sample cups and which prevents a start of engraving.

Babel discloses a monitoring device (figure 1(12) of Babel) that checks the presence of an object in a given operating area (column 4, lines 24-28 of Babel), which prevents the start of operation of the main device when the object is present in said given operating area (column 4, lines 24-28 of Babel).

Wouch and Babel are combinable because they are from similar problem solving areas, namely digital control of electronic device operation based on digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a monitoring device to prevent operation of the main device if an object is detected to be present on in a specific operating area, as taught by Babel, wherein the object is the measurement device (figure 1(32) and column 4, lines 55-58 of Wouch) taught by Wouch, the main device is the engraving device taught by Wouch, and the operation is the engraving process, as taught by Wouch. In Babel, the operator is protected from injury by the detector preventing movement of the stand during loading. Applied to the engraving device of Wouch, the measurement device would be detected where said measurement device would be likely to be broken, namely on the printing cylinder, which is the portion of the engraving device that has the greatest level of physical motion. If the

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measurement device, which is put in place on the printing cylinder for measuring actual dimensions of engraved sample cups (figure 3 and column 4, lines 31-35 of Wouch), is detected on the printing cylinder, then the engraving operations are prevented. The motivation for doing so would have been to prevent destruction of the measurement device taught by Wouch. One of ordinary skill in the art at the time of the invention would have recognized that the detector taught by Babel operates for the purpose of preventing injury to the operator. Thus, applied to the engraving device of Wouch, one of ordinary skill in the art at the time of the invention would have recognized that the detector of Babel, if applied to the teachings of Wouch, would prevent destruction to the measurement device. Therefore, it would have been obvious to combine Babel with Wouch to obtain the invention as specified in claim 29.

**Regarding claim 42:** Wouch discloses, before actual engraving of the printing cylinder with an engraving stylus of an engraving element driven by an engraving control signal (column 3, lines 2-8 of Wouch), engraving sample cups (figure 1 (14) and figure 3 of Wouch) for predetermined rated tonal values in a test engraving with the engraving stylus (column 3, lines 10-14 and lines 18-22 of Wouch); measuring actual dimensions of the sample cups with a measurement device adjacent to the printing cylinder (column 4, lines 54-59 of Wouch) and comparing the actual dimensions to rated dimensions corresponding to the predetermined rated tonal values (column 4, line 66 to column 5, line 2 of Wouch) in order to acquire setting values with which the engraving control signal is calibrated (column 4, lines 43-48 of Wouch) such that engraved actual tonal values correspond

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to the rated tonal values to be engraved (column 3, line 66 to column 4, line 5 of Wouch).

Wouch does not disclose expressly carrying out a monitoring to see whether or not the measurement device is present on the printing cylinder; and preventing an engraving start when the measurement device is present on the printing cylinder.

Babel discloses carrying out a monitoring to see whether or not an object is present in a given operating area (column 4, lines 24-28 of Babel); and preventing the start of operation of the main device when the object is present in said given operating area (column 4, lines 24-28 of Babel).

Wouch and Babel are combinable because they are from similar problem solving areas, namely digital control of electronic device operation based on digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to prevent operation of the main device if an object is detected to be present on in a specific operating area, as taught by Babel, wherein the object is the measurement device taught by Wouch, the main device is the engraving device taught by Wouch, and the operation is the calibration of the engraving device, as taught by Wouch. In Babel, the operator is protected from injury by the detector preventing movement of the stand during loading. Applied to the engraving device of Wouch, the measurement device would be detected where said measurement device would be likely to be broken, namely on the printing cylinder, which is the portion of the engraving device that has the greatest level of physical motion. If the measurement device is detected on the printing cylinder, then the engraving operations are prevented. The motivation for doing so would have been to prevent destruction

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of the measurement device taught by Wouch. One of ordinary skill in the art at the time of the invention would have recognized that the detector taught by Babel operates for the purpose of preventing injury to the operator. Thus, applied to the engraving device of Wouch, one of ordinary skill in the art at the time of the invention would have recognized that the detector of Babel, if applied to the teachings of Wouch, would prevent destruction to the measurement device. Therefore, it would have been obvious to combine Babel with Wouch to obtain the invention as specified in claim 42.

9. Claims 22 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of Babel (US Patent 5,417,038) and Pantus (US Patent 5,499,016).

**Regarding claim 22:** Wouch in view of Babel does not disclose expressly that the presence of the measurement device is monitored with a light beam.

Pantus discloses monitoring the presence of an object with a light beam (column 5, lines 30-35 and column 7, lines 16-20 of Pantus).

Wouch in view of Babel is combinable with Pantus because they are from similar problem solving areas, namely digital control of electronic device operation based on the detection of objects. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a light beam for object detection, as taught by Pantus. The suggestion for doing so would have been that using light beams is one of several different possible means by which objects can be detected. Therefore, it would have been obvious to combine

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Pantus with Wouch in view of Babel to obtain the invention as specified in claim 22.

**Regarding claim 30:** Wouch in view of Babel does not disclose expressly that the monitoring device comprises a stationary optoelectronic sensor for generating a monitoring beam proceeding in an axial direction of the printing cylinder and for converting a reflected monitoring beam into an electrical control signal that signals the presence of the measurement device on the printing cylinder; and a reflector for the monitoring beam that is attached to the measurement device and faces toward the stationary sensor.

Pantus discloses a monitoring device comprising a stationary optoelectronic sensor (figure 6 of Pantus) for generating a monitoring beam proceeding in a direction in which the beam reflecting object is likely to be located (column 4, lines 61-63 and column 6, lines 33-40 of Pantus) and for converting a reflected monitoring beam into an electrical control signal (column 5, lines 43-47 of Pantus) that signals the presence of the object (column 5, lines 15-22 of Pantus).

Wouch in view of Babel is combinable with Pantus because they are from similar problem solving areas, namely digital control of electronic device operation based on the detection of objects. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use an optoelectronic sensor, as taught by Pantus, as said monitoring device. Since the monitoring device taught by Pantus acts on optoelectronic principles, the outer housing of the measurement device itself (figure 1(32) of Wouch), which is on the printing cylinder, is a reflector for the monitoring beam that is attached to the measurement device and faces toward the

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stationary sensor. Since the monitoring beam taught by Pantus proceeds in a direction in which the beam reflecting object is likely to be located, then the beam would naturally, in the engraving system of Wouch, proceed in an axial direction of the printing cylinder. The motivation for doing so would have been to provide a monitor that is responsive to the measuring device and not to insignificant objects, such as flying insects (column 3, lines 26-29 of Pantus). Therefore, it would have been obvious to combine Pantus with Wouch in view of Babel to obtain the invention as specified in claim 30.

**Further regarding claim 31:** Pantus discloses that said optoelectronic sensor is part of the electronics (figure 6 and column 3, lines 56-58 of Pantus), and thus part of the overall device and encased in the physical housing (figure 3 and column 4, lines 28-30 of Pantus). Thus, the optoelectronic sensor is attached to the overall system, which is the engraving machine taught by Wouch.

**Further regarding claim 32:** As discussed in the arguments regarding claim 30, the monitoring beam proceeds in an axial direction of the printing cylinder. Thus, in order to function as a monitoring beam, it is inherent that said monitoring beam is designed with a lobe in an axial direction of the printing cylinder. Otherwise, there would be no electromagnetic radiation transmitted along the axial direction of the printing cylinder that could then be reflected and used to detect the measuring device.

10. Claims 24-27 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of Babel (US Patent 5,417,038) and well-known prior art.

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**Regarding claim 24:** Wouch discloses that the actual dimensions of the engraved sample cups measured with the measurement device are transmitted from the measurement device to a stationary measured value receiver (figure 1(38) of Wouch) as measured value signals (column 4, lines 59-65 of Wouch).

Wouch in view of Babel does not disclose expressly that said transmission is performed wirelessly.

**Official notice is taken** that wireless transmission of data is old, well-known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit the measured data wirelessly. The suggestion for doing so would have been that wireless transmission is one of many possibly data transmission types. Further, it is well-known in the art that transmission of data by wireless has the advantage of not requiring transmission wires, which can be costly, cumbersome, and get in the way of device operation.

**Regarding claim 25:** Wouch discloses that the stationary measured value receiver is located at the engraving machine (figure 1(38) and column 2, lines 46-48 of Wouch).

**Regarding claim 26:** Wouch discloses that the transmission of the measured values signals (column 4, lines 63-68 of Wouch) only occurs during calibration (column 4, line 68 to column 5, line 5 of Wouch). The transmission of measured values signals

As discussed in the arguments regarding claim 24, the transmission is performed wirelessly.

**Regarding claim 27:** Wouch discloses that measurements are taken (column 4, lines 31-35 of Wouch) and measured values transmitted at a specific point in the sequence (figure 2 of Wouch) of the control and calibration of the engraving device



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(column 4, lines 54-62 of Wouch). Thus, the transmission of the measured values signals is enabled by a control signal. One of the control signals is the control signal taught by Babel and discussed in the arguments with regard to claim 23, listed above. Since said control signal is generated based on whether or not the measurement device is located on the printing cylinder, and since the measurement device would have to be on the printing cylinder to measure the test cuts, then said control signal would also enable the transmission of the measured value signals.

As discussed in the arguments regarding claim 24, which are incorporated herein, the transmission is specifically wireless transmission.

**Regarding claim 33:** Wouch discloses that the measurement device comprises a built-in measure value transmitter for transmission of the measured actual dimensions of the test cups (column 4, lines 59-65 of Wouch); and a corresponding measured value receiver (figure 1(38(portion)) and column 4, lines 59-65 of Wouch) that is connected to the signal editing unit and which is attached to the engraving machine (as shown clearly in figure 1 of Wouch).

Wouch in view of Babel does not disclose expressly that said transmission is specifically wireless transmission.

**Official notice is taken** that wireless transmission of data is old, well-known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit the measured data wirelessly. The suggestion for doing so would have been that wireless transmission is one of many possibly data transmission types. Further, it is well-known in the art that transmission of data

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by wireless has the advantage of not requiring transmission wires, which can be costly, cumbersome, and get in the way of device operation.

**Regarding claim 34:** Wouch discloses that the monitoring device is in an interactive connection with the measured value receiver (column 4, lines 63-66 of Wouch).

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of Babel (US Patent 5,417,038), well-known prior art, and *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

**Regarding claim 28:** Wouch discloses that the measurement device is respectively put in place on the printing cylinder of the engraving machine with which the test engraving was implemented (column 4, lines 31-35 of Wouch). In order to be able to actually physically measure the test cuts, it is inherent that the measurement device be put in place on the printing cylinder of the engraving machine with which the test engraving was implemented.

Wouch further discloses that measurements are taken (column 4, lines 31-35 of Wouch) and measured values transmitted at a specific point in the sequence (figure 2 of Wouch) of the control and calibration of the engraving device (column 4, lines 54-62 of Wouch). Thus, the transmission of the measured values signals is enabled by a control signal. One of the control signals is the control signal taught by Babel and discussed in the arguments with regard to claim 23, listed above. Since said control signal is generated based on whether or not the measurement device is located on the printing cylinder, and since the measurement device would have to be on the printing

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cylinder of a corresponding engraving machine to measure the test cuts, then said control signal would also selectively enable the transmission of the measured value signal.

Wouch in view of Babel does not disclose expressly that said transmission is wireless; and that a plurality of engraving machines are present.

**Official notice is taken** that wireless transmission of data is old, well-known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit the measured data wirelessly. The suggestion for doing so would have been that wireless transmission is one of many possibly data transmission types. Further, it is well-known in the art that transmission of data by wireless has the advantage of not requiring transmission wires, which can be costly, cumbersome, and get in the way of device operation.

Wouch in view of Babel and well-known prior art does not disclose expressly that a plurality of engraving machines are present.

However, *In re Harza* has held that a mere duplication of parts, which is involved in providing the step that a plurality of engraving machines are present, has no patentable significance unless a new and unexpected result is produced. Clearly, there is no new and unexpected result in the mere presence of additional engraving devices in the general proximity of the engraving device upon which the method is being performed. Furthermore, the presence of a plurality of engraving machines is not even a step of a method, but more properly directed to a machine or article of manufacture claim, and thus has no substantive bearing on the method of claim 28.

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12. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of well-known prior art.

**Regarding claim 35:** Wouch discloses a built-in measured value transmitter for transmission of measured actual dimensions of engraved test cups (column 4, lines 31-35 of Wouch) to a stationary measured value receiver (column 4, lines 59-66 of Wouch).

Wouch does not disclose expressly that said transmission is specifically wireless transmission.

**Official notice is taken** that wireless transmission of data is old, well-known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit the measured data wirelessly. The suggestion for doing so would have been that wireless transmission is one of many possibly data transmission types. Further, it is well-known in the art that transmission of data by wireless has the advantage of not requiring transmission wires, which can be costly, cumbersome, and get in the way of device operation.

**Regarding claim 36:** Wouch does not disclose expressly that said measurement device is battery operated.

**Official Notice is taken** that battery operated devices, such as measurement devices, or any other low-to-moderate power electronic devices, are old, well-known and expected in the art. Thus, one of ordinary skill in the art at the time of the invention would be motivated to make the measurement device specifically a battery operated measurement device. The motivation would have been to allow a user to have an independent power source for said measurement device, instead of

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having to deal with the tangle of cables that tends to result from having multiple devices electrically connected together and drawing power from the same power source.

**Regarding claim 37:** Wouch discloses that the measurement device is a measuring microscope (column 4, lines 59-62 of Wouch).

13. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of well-known prior art and Yoshida (US Patent 5,828,464).

**Regarding claim 38:** Wouch in view of well-known prior art does not disclose expressly that the measurement device is a video camera.

Yoshida discloses measuring engraving cup dimensions using a video camera (figure 4(45) and column 4, lines 50-55 of Yoshida).

Wouch in view of well-known prior art is combinable with Yoshida because they are from the same field of endeavor, namely the control and calibration of engraving machines. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a video camera for measurements, as taught by Yoshida. The motivation for doing so would have been that the data obtained by the video camera can be directly processed by an image processor (column 4, lines 53-55 of Yoshida). Therefore, it would have been obvious to combine Yoshida with Wouch in view of well-known prior art to obtain the invention as specified in claim 38.

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14. Claims 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of well-known prior art and Pantus (US Patent 5,499,016).

**Regarding claims 39 and 40:** Wouch in view of well-known prior art does not disclose expressly that a light element, comprising a reflector, is provided on the measurement device designed for determining whether the measurement device is present on the engraving printing cylinder.

Pantus discloses monitoring the presence of an object with a light beam (column 5, lines 30-35 and column 7, lines 16-20 of Pantus).

Wouch in view of well-known prior art is combinable with Pantus because they are from similar problem solving areas, namely digital control of electronic device operations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a light beam for object detection, as taught by Pantus. Thus, if a light beam is used, then the outer housing of the measurement device itself is a light element, comprising a reflector, provided on said measurement device. Thus, the system of Pantus determines, based on the reflections from said reflector, whether the measurement device is present on the engraving printing cylinder. The suggestion for doing so would have been to be able to passively detect an object in an area to be monitored (column 2, lines 26-30 of Pantus), which would be the measurement device in the area of the printing cylinder. Therefore, it would have been obvious to combine Pantus with Wouch in view of well-known prior art to obtain the invention as specified in claims 39 and 40.

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15. Claims 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouch (US Patent 5,293,426) in view of well-known prior art, Pantus (US Patent 5,499,016), and Babel (US Patent 5,417,038).

**Regarding claim 41:** Wouch in view of well-known prior art does not disclose expressly that the measurement device has a component for interacting with a light beam used for determining whether the measurement device is put in place on the printing cylinder in order to prevent a start of engraving if the measurement device is in place on the printing cylinder.

Pantus discloses monitoring the presence of an object with a light beam (column 5, lines 30-35 and column 7, lines 16-20 of Pantus).

Wouch in view of well-known prior art is combinable with Pantus because they are from similar problem solving areas, namely digital control of electronic device operations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a light beam for object detection, as taught by Pantus. Thus, if a light beam is used, then the outer housing of the measurement device itself is a component for interacting with said light beam, such as a reflector. Thus, the system of Pantus determines, based on the reflections from said reflector, whether the measurement device is present on the engraving printing cylinder. The suggestion for doing so would have been to be able to passively detect an object in an area to be monitored (column 2, lines 26-30 of Pantus), which would be the measurement device in the area of the printing cylinder. Therefore, it would have been obvious to combine Pantus with Wouch in view of well-known prior art.

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Wouch in view of well-known prior art and Pantus does not disclose expressly preventing a start of engraving if the measurement device is in place on the printing cylinder.

Babel discloses preventing the start of operation of the main device when the object is present in said given operating area (column 4, lines 24-28 of Babel).

Wouch in view of well-known prior art and Pantus is combinable with Babel because they are from similar problem solving areas, namely the detection of objects in a specific area and the control of digital electronic devices. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to prevent the operation of the main device if an object is present in a given area, as taught by Babel, wherein the object is the measuring device and the area is on the printing cylinder. The motivation for doing so would have been to prevent destruction of the measurement device taught by Wouch. One of ordinary skill in the art at the time of the invention would have recognized that the detector taught by Babel operates for the purpose of preventing injury to the operator. Thus, applied to the engraving device of Wouch, one of ordinary skill in the art at the time of the invention would have recognized that the detector of Babel, if applied to the teachings of Wouch, would prevent destruction to the measurement device. Therefore, it would have been obvious to combine Babel with Wouch in view of well-known prior art and Pantus to obtain the invention as specified in claim 41.

**Regarding claim 43:** Wouch discloses a built-in measured value transmitter for transmission of measured actual dimensions of engraved test cups (column 4, lines 31-35 of Wouch) to a



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stationary measured value receiver (column 4, lines 59-66 of Wouch).

Wouch does not disclose expressly that said transmission is specifically wireless transmission.

**Official notice is taken** that wireless transmission of data is old, well-known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to transmit the measured data wirelessly. The suggestion for doing so would have been that wireless transmission is one of many possibly data transmission types. Further, it is well-known in the art that transmission of data by wireless has the advantage of not requiring transmission wires, which can be costly, cumbersome, and get in the way of device operation.

Wouch in view of well-known prior art does not disclose expressly a component which is part of the measurement device for interacting with a light beam in order for determining whether the measurement device is put in place on the printing cylinder so that engraving of either test cups or of actual cups will not commence until the measurement device is removed from the printing cylinder.

Pantus discloses monitoring the presence of an object with a light beam (column 5, lines 30-35 and column 7, lines 16-20 of Pantus).

Wouch in view of well-known prior art is combinable with Pantus because they are from similar problem solving areas, namely digital control of electronic device operations. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to specifically use a light beam for object detection, as taught by Pantus. Thus, if a light beam is

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used, then the outer housing of the measurement device itself is a component for interacting with said light beam, such as a reflector. Thus, the system of Pantus determines, based on the reflections from said reflector, whether the measurement device is present on the engraving printing cylinder. The suggestion for doing so would have been to be able to passively detect an object in an area to be monitored (column 2, lines 26-30 of Pantus), which would be the measurement device in the area of the printing cylinder. Therefore, it would have been obvious to combine Pantus with Wouch in view of well-known prior art.

Wouch in view of well-known prior art and Pantus does not disclose expressly that engraving of either test cups or of actual cups will not commence until the measurement device is removed from the printing cylinder.

Babel discloses preventing the start of operation of the main device when the object is present in said given operating area (column 4, lines 24-28 of Babel).

Wouch in view of well-known prior art and Pantus is combinable with Babel because they are from similar problem solving areas, namely the detection of objects in a specific area and the control of digital electronic devices. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to prevent the operation of the main device if an object is present in a given area, as taught by Babel, wherein the object is the measuring device and the area is on the printing cylinder. The motivation for doing so would have been to prevent destruction of the measurement device taught by Wouch. One of ordinary skill in the art at the time of the invention would have recognized that the detector taught by Babel operates for the purpose of preventing injury to the

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operator. Thus, applied to the engraving device of Wouch, one of ordinary skill in the art at the time of the invention would have recognized that the detector of Babel, if applied to the teachings of Wouch, would prevent destruction to the measurement device. Therefore, it would have been obvious to combine Babel with Wouch in view of well-known prior art and Pantus to obtain the invention as specified in claim 43.


### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson  
Examiner  
Art Unit 2624



12 September 2005



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PRIMARY EXAMINER